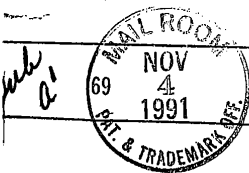


# **EXHIBIT F**



59

~~CITRUS OIL COMPOSITIONS  
AND USES THEREOF~~

in NO/fee  
07/786804

8. The present invention <sup>is a continuation-in-part of</sup> ~~relates to my prior~~  
~~application identified as~~ Serial No. 07/413,395 filed  
September 27, 1989 which has matured into U.S. Patent  
No. 5,063,062 issued November 5, 1991.

FIELD OF THE INVENTION

5 The present invention generally relates to  
compounds that may be topically applied to the human  
skin for cleaning the skin, for treating and/or  
relieving skin conditions, such as acne, sunburn, rashes  
and the like, and as a repellent of insects.  
10 Specifically, the present invention is directed to  
compositions of natural ingredients containing citrus  
oils as an active constituent.

BACKGROUND OF THE INVENTION

15 In my previous patent application of which this  
patent application is a continuation-in-part, the  
composition described therein contains orange oil and  
other components which in combination made the  
composition suitable for external application to human  
skin tissue in order to remove unwanted substances such  
as tar, caulking compounds, sealants, adhesives and the  
20 like. Further research has shown that the present  
invention has a variety of other useful attributes which

were previously undiscovered. This composition is capable of not only removing unwanted substance from the skin but also of soothing the pain of sunburn and the pain and irritation associated with skin tissues exposed to poisonous plants. Further, it has been discovered that the ingredients in this composition act to clear up skin eruptions such as acne when topical applied to the human skin. Also, surprisingly, this composition when topically applied acts as an insect repellent.

The present product is formulated of a combination of substances which are naturally occurring plant substances and are not believed to be toxic to the human body. The chemical d-limonene which is derived from citrus fruits, has been recognized in the past to have some cleaning capabilities. However, prior to the present invention, it is not believed that the suitability of the orange oil or other citrus oils for use on human skin was realized. Orange oil by itself is a skin irritant that can cause inflammation of the tissues. When used alone, fumes from orange oil can cause headaches, dizziness and other side effects. D-limonene has been found to be suspect for use with animals. Accordingly, it has not been readily apparent that orange oil and/or citric oils alone or in combination with other substances would prove effective in a compound which was to be used directly on the tissues of the human skin. Rather, d-limonene in the

past has been utilized in such things as cleaning solvents which produce floor cleaners, glass cleaners and the like.

5 Aloe vera extract, another component of this composition is a natural product derived from the aloe vera plant. Aloe vera extract has been recognized in the past to have some ability to soothe burn pain. Prior to the present invention however, it was not believed that small amounts of aloe vera alone or in  
10 combination with citrus oil and/or moisturizers would act not only to soothe sunburn pain but also to reduce the peeling of skin after the sunburn. Furthermore, the combination of citrus oil, moisturizers and aloe vera to soothe skin irritations due to contact with poisonous  
15 plants was not believed to be known. It also was not readily apparent that citrus oil in combination with aloe vera alone or in combination with other substances could prove an effective acne cleaning substance. Nor was there prior knowledge that citrus oil and aloe vera  
20 when combined with other ingredients could act as a pleasant smelling insect repellent.

#### SUMMARY OF THE INVENTION

It is an object of the present invention to provide a skin cleaning composition useful in clearing up acne.

25 Another object of the present invention is to provide a composition for topical application to human

skin suitable to soothe skin pain from sunburn or from skin irritations such as those which develop after contact with poisonous plants like poison ivy, poison oak and the like.

5 Yet another object of the present invention is to provide a pleasant smelling composition useful in repelling insects.

10 Still another object of the present invention is to provide a non-toxic composition which, when topically applied, cleanses skin tissue, soothes skin pain and protects from insect bites.

It is a further object of the present invention is to provide a skin cleaning composition that is derived from plant sources.

15 It is a still further object of the present invention to provide a new an useful compound for cleaning the human skin and packaging therefor.

20 A still further object of the present invention is to provide a skin cleaning compound suitable for cleaning non-water soluble products such as grease, caulking, adhesives, sealants, tar, oils, ink and the like.

25 Still a further object of the present invention is to provide a composition for topical application to skin that acts to help revitalize the human skin.

The present invention, then, provides a skin composition which is adapted for external use on human

tissues. Broadly, this composition comprises a first ingredient being between five percent (5%) and sixty percent (60%) by volume of citrus oil, a second ingredient being a pharmaceutically acceptable moisturizer for human skin and a third ingredient being an emulsifying agent. Preferably, the moisturizer is selected from a group consisting of: glycerin, aloe vera, jojoba oil, and safflower oil. Further, the emulsifying agent can also function as an emollient. Preferably the emulsifying agent is a natural grain derivative, either oat gum or oatmeal are good selections. Further, the first, second, and third ingredients are selected and mixed in a ratio such that the resulting composition, which is suitable for topical skin application, has a pH range of between 4.5 and 6.0 inclusively. To this end, a fourth ingredient in the form of a buffering compound may be added to the composition.

In the more specific composition according to the preferred embodiment, the composition comprises forty-five percent (45%) or less by volume of orange oil, forty-five percent (45%) or less by volume of the emulsifying agent and the pharmaceutically acceptable moisturizer. The preferred emulsifying agent in this composition is oatmeal or oatgum, and the preferred moisturizer is a mixture of jojoba oil, aloe vera and glycerin mixed by volume of approximately four parts

jojoba oil, five parts aloe vera and two parts glycerin. When the composition is formulated as a cleaning composition for removal of adhesives, tar, and the like the preferred moisturizer is a mixture of jojoba oil, aloe vera and glycerin mixed by volume of approximately two parts jojoba oil, two parts aloe vera and one part glycerin. It is further desired to use a small portion of safflower oil both as a moisturizer and to help form a stable emulsion.

Various methods of utilizing compositions as described above are also described. For example, a method for treating ~~damaged~~ <sup>damaged</sup> animal tissue is set forth. Such ~~damaged~~ <sup>damaged</sup> tissues may include burns, such as radiation burns. These radiation burns specifically include sunburn caused by solar radiation. The damaged area comprise an inflammatory condition. Included within these conditions are acne and rashes, such as rashes caused by poisonous plants. Finally, methods incorporating the composition as an insect repellent are described.

These and other objects of the present invention will become more readily appreciated and understood from a consideration of the following detailed description of the preferred embodiment:

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention is directed to a composition utilized on skin tissues and having, as an ingredient,

commercially available, citrus oil derived from citrus fruit. In its broad form, the composition includes citrus oil, an emulsifying agent and a pharmaceutically acceptable moisturizer. In order to determine the preferred composition of the present invention, a series of samples having differing properties were evaluated to establish a desired range in pH and to establish the necessary proportion of citrus oil to the other ingredients to permit the composition to remove unwanted substances from the skin, to soothe burns, clear acne, repel insects and soothe skin contacted by poisonous plants. References herein to proportions, unless otherwise set forth, are to volumetric amounts.

In investigating this composition, several different citrus oils in combination with moisturizers and an emulsifying agent were tested. The following oils were tested: lemon oil, orange oil, grapefruit oil, lime oil and tangerine oil. These citrus oils worked to varying degrees; it was determined that orange oil in the range of 5% - 60% in combination with the other ingredients produced the least astringent, most soothing moisturizing product. Furthermore, orange oil in combination with the other ingredients worked best to clean substances from the skin, soothe skin pain, clear-up acne and repel insects.



A variety of moisturizers can be employed in the present invention. The preferred moisturizers are naturally occurring plant oils such as grain oils, flower oils, vegetable oils, nut oils, fruit oils and the like. For example, kuki nut oil, olive oil, macadamian nut oil, jojoba oil, corn oil, coconut oil, sunflower oil and safflower oil, to name just a few, have been employed in the present composition. After substantial testing it was determined that olive oil was the most effective emollient. However, due to the strong fragrance associated with olive oil it was not selected for use in the present invention. The preferred oil should have little or no odor since the composition is to be applied to the skin. Further, by using an oil with minimal odor, the fragrance produced by the citrus oil does not have to compete with the moisturizing fragrance. Thus, the preferred oils are macadamian nut oil and jojoba oil. The most preferred being jojoba oil due to availability and cost.

Another moisturizer which is included in the present invention is relatively pure aloe vera plant extract. The aloe vera is an emollient with a recognized capability to soothe burn pain. When mixed with the citrus oil the aloe vera which has a pH of approximately 8 and acts to buffer the acidic pH of the citrus oil. This in turn renders the composition less astringent and more soothing to the skin.

To make a smooth composition, additional moisturizers can be added. Specifically, stabilizers and carriers can be added such as safflower oil and glycerin. These moisturizers tend to give the composition a more consistent texture. The moisturizer, thus, is a mixture of jojoba oil, aloe vera and glycerin mixed by volume of approximately two parts jojoba oil, two parts aloe vera and one part glycerin when formulated as a cleaning composition. Approximately four parts jojoba oil, five parts aloe vera, two parts glycerin and one part or less than one part safflower oil is employed when the composition is not formulated for cleaning.

The third ingredient in the present invention is an emulsifier. Originally a 87% aloe vera lotion having a variety of emulsifying constituents was added to the citrus oil and the moisturizers. Further, research revealed that grain based emulsifiers such as corn, wheat, barley rice, and oats provided the desired texture and provided some water which helped buffer the pH of the composition.

Wheat and oats were the grain <sup>based</sup> ~~base~~ derivatives most preferred as emulsifying agents. Wheat, however, did not provide the desired texture to the composition. Oatmeal provided the best texture for a composition employed as a cleaning composition or as an acne

cleaning and treatment composition as it was slightly abrasive.

Oatmeal is prepared by boiling rolled oats in water. The resulting mass (containing approximately 50% water) is used in the composition. Oatgum which is prepared by boiling oats in water and straining the resultant mass to remove hulls and particulate material provided the best texture for insect repellent and for a composition employed to soothe skin pain due to burns and poisonous plant contact.

The pH of the composition is based on the total percentage of citrus oil in the composition. The more citrus oil the more acidic the composition. Preferably the composition will be formulated to have a pH between 4.0 - 6.5 inclusively. More preferably a pH of 5.5 appears to provide the best characteristics to the composition.

The composition can be formulated with between 5%-60% citrus oil, pharmaceutically accepted moisturizers for skin and a one or more emulsifier. In the preferred embodiment of the present invention the moisturizers comprise 10%-35% of the composition with the emulsifying agent making up the rest of the available percentage. 2%-3% vitamin E can also be added to the composition, however, this is an optional constituent and it is not employed in the preferred embodiment due to cost.

The preferred embodiment of the present invention has 10%-45% citrus oil. The preferred embodiment of the present invention when formulated as a cleaning composition has 30%-45% volume of citrus oil. The preferred embodiment of the present invention when formulated as other than a cleaning compound has 10%-20% citrus oil, specifically orange oil. When the composition is utilized as an insect repellent the preferable amount of orange oil is 15%-20%. When the composition is utilized for skin pain soothing, such as burns and poisonous plant irritations or to relieve acne, the preferred amount of orange oil is 10%-15%.

Approximately 7%-14% aloe vera is added to the composition. The preferred amount of aloe vera being 10%. When formulated as a cleaning composition approximately two parts jojoba oil, two parts aloe vera and one part glycerin is used. It is desirable to add a small portion of safflower oil as an emulsion stabilizer, as an emulsifying agent and as a moisturizer. The remaining percentage is an emulsifier. When formulated other than as a cleaning composition twenty percent less plant oil is employed than the amount of aloe vera. Thus, when 10% aloe vera, or 5 parts aloe vera is employed in the preferred embodiment 8% jojoba, or 4 parts jojoba is added. Between .5%-2% safflower oil, approximately one part or less, and 3%-6% or approximately 2 parts glycerin is added to stabilize

the composition. The remaining percentage is an emulsifier.

5 For all applications and formulations of the composition, the primary emulsifier is formulated from a grain derivative product such as oatmeal or oatmeal gum. The composition can be thickened for ease of application if so desired by the addition of corn starch or potato starch or flour or any other naturally occurring thickening agents. To formulate the preferred  
10 embodiment the various ingredients are added to the oatmeal paste with the citrus oil being added last. The ingredients are then blended to form a smooth homogenized composition.

#### A. Cleaning Compositions

15 In our investigation of cleaning compositions according to the present invention, we first investigated several compositions which were mixtures of orange oil, water, moisturizers and vitamin E. These samples were developed to test the cleaning properties of orange oil and to evaluate orange oil mixed with  
20 moisturizing agents. A test group of ten persons, male and female, were selected to subjectively evaluate the results of these samples. Initially, three such samples were prepared, and the compositions are set forth as Samples I-III, as follows:

SAMPLE I

<u>Ingredient</u>	<u>Volume Percent (Approximate)</u>
Orange Oil	39
Water	33
Glycerin*	12
Aloe Vera*	12
Jojoba Oil*	3
Vitamin E	1

\* Total Moisturizers accounted for approximately 27% by volume.

SAMPLE II

<u>Ingredient</u>	<u>Volume Percent (Approximate)</u>
Orange Oil	34.5
Water	27.5
Glycerin*	17
Aloe Vera*	14
Jojoba Oil*	3.5
Vitamin E	3.5

\* Total Moisturizers accounted for approximately 34.5% by volume.

SAMPLE III

<u>Ingredient</u>	<u>Volume Percent (Approximate)</u>
Orange Oil	37

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Water	26
Glycerin*	14.75
Aloe Vera*	14.75
Jobba Oil*	3.5
Vitamin E	4

\* Total Moisturizers accounted for approximately 33% by volume.

Prior to presenting these samples to the test group, Applicants tested the relative acidity of the samples since it was believed desirable to avoid a composition that was either too acidic or too basic. The result of this acidity measurement, correlated to the Samples, is set forth in Table 1 below:

TABLE 1

<u>Sample</u>	<u>pH</u> <u>(Approximate)</u>
I	4.5
II	5
III	4.7

In each of the cases of Samples I-III, the respective components were mixed and blended in an attempt to form an emulsion. An initial problem was noted with each of these Samples, however, in that the emulsion separated, that is, "broke" after approximately one to two days. Since it was fairly simple to re-blend the Samples, Samples I-III were submitted to the test

group for evaluation. Generally, the results of the composition was excellent with each of Samples I-III readily removing polyurethane and silicone base caulking compounds, tars, grease, oil and adhesives; each of these industrial type substances are regarded as difficult to remove, from the human hands. All ten members of the test group reported comparable cleaning properties and reported that their hands were left soft after a two week period of using the compounds. Indeed, after two weeks of use, certain male members of the test group who had dry hands resulting from the use of other solvents noted substantial improvement in the texture and softness of their hands. No allergic reactions were reported by any members of the test group.

After determining that test Samples I-III performed adequately in cleaning the hands and in moisturizing the hands, it became necessary to determine whether the oil orange and moisturizer emulsion could be stabilized so that it would not break over a period of time. In order to determine if a natural ingredient could act as an emulsifying agent, a grain base derivative was selected as an emulsifying agent. To this end, tests of oatmeal gum and oatmeal as the primary emulsifier were performed. Accordingly, two more test samples, Samples IV and V were prepared according to the compositions set forth below:



SAMPLE IV

<u>Ingredient</u>	<u>Volume Percent (Approximate)</u>
Orange Oil	42.75
Aloe Vera*	7
Jojoba Oil*	3.5
Safflower Oil*	4
Oatmeal Gum	42.75

\* Total Moisturizers accounted for approximately 14.5% by volume.

SAMPLE V

<u>Ingredient</u>	<u>Volume Percent (Approximate)</u>
Orange Oil	36.5
Aloe Vera	14
Jojoba Oil*	14
Glycerin*	7
Safflower Oil*	0.5
Oatmeal	28

\* Total Moisturizers accounted for approximately 35.5% by volume.

5 It may be noted that, in Samples IV and V, vitamin E and water were both omitted from the composition. However, it should also be noted that both the oatmeal gum in Sample IV and the oatmeal in Sample V each contain a portion of water. In Sample IV, the oatmeal gum was prepared by boiling rolled oats in water and

straining the resultant mass to remove the hulls. In Sample V, rolled oats were boiled in water and the resulting mass (containing approximately 50% water) was used to prepare the composition. Relatively equal parts of orange oil and oat derivatives were used and a small portion of safflower oil was included. Again, relative acidity was tested and it was found that Sample IV had a pH of approximately 5.0 while Sample V had a pH of 5.5.

Samples IV and V were submitted to the test group to evaluate cleaning effectiveness and moisturizing ability. Further, observation of the two compositions were made to determine whether or not the emulsions broke. The results of this study determined that the emulsion of Sample IV broke after approximately seven days while the emulsion according to Sample V did not separate over any observed duration of time (several months). The test group observed that the cleaning properties of Samples IV and V were almost, but not quite, as effective as the cleaning properties of Samples I-III, but that the cleaning effectiveness was estimated at approximately 90% of Samples I-III. With respect to Sample IV, the test group reported that their hands did not roughen, but that the sample did not feel as comfortable when on the hands. With respect to Sample V, the test group reported that the emulsion both felt comfortable on the hands and left their hands soft after approximately five days of regular usage. In each

case, the emulsions were able to clean all caulking materials and tars, including silicone and polyurethane based caulking compounds as well as oil and grease from the skin. Further tests were conducted on compositions similar to Sample V where in the amount of orange oil was slightly increased while holding the amounts of the remaining ingredients constant until the emulsion broke. It was found that, with these compositions, the emulsion broke when orange oil accounted for approximately 38% by volume of the composition.

From the foregoing, Applicants determined that Sample V offered the best compromise among emulsion stability, cleaning effectiveness, and skin effect.

In order to increase the amount of orange oil, Applicants further tested a variation on Sample V wherein both the amount of orange oil and the amount of oatmeal were increased while the amount of moisturizers was decreased. This Sample VI, was prepared as follows:

SAMPLE VI

<u>Ingredient</u>	<u>Volume Percent</u> <u>(Approximate)</u>
Orange Oil	40.5
Aloe Vera*	7.75
Jojoba Oil*	7.75
Glycerin*	4.5
Safflower Oil*	.5

Oatmeal

39

\* Total Moisturizers accounted for 20.5% by volume

From Sample VI, it was concluded that orange oil could be increased, along with a corresponding increase in an oat grain derivative, until approximately 45% by volume of orange oil was included in the composition.

5 Any amount of orange oil in excess of this amount would result in the diminishment of moisturizers so as to negate the softening effect of the hand cleaning composition according to the preferred invention.

10 The preferred cleaning composition may be packaged in towellets, formed of standard absorbent material such as paper, cloth, and the like. These towellets can be hermetically sealed in standard foil packages, as known in the industry, so that the user can employ the pre-moistened towellet to topically apply the composition to the skin. This is particularly useful for application to acne in situations where water is not readily available. Further, individualized packets of pre-moistened towellets are convenient for portability and packaging.

#### B. Composition As After Sun Lotion

20 In the investigation of the characteristics of the composition according to the present invention, Twenty-two people initially tested the preferred embodiment having 10%-20% orange oil and having 10% by volume of

aloe vera as an after sun lotion. The people ranged in age from 6 months to 54 years of age. Four of the subjects were dark skinned or olive skinned with dark hair. Six of the subjects were lighter skinned but reported that they tanned readily. The remaining 12 subjects had fair complexions with blonde or red hair. The fair complexion subjects reported that their skin was highly sun sensitive and that sun exposure produced sunburn not suntan.

A representative sample of the subjects were exposed to the sun at sea level a sufficient length of time to produce a sunburn. The remaining ten subjects were exposed to the sun at an elevation of one mile above sea level. Depending on the complexion of the subjects the sunburns ranged from a mild red tint to a deep red color. Immediately after sun exposure, the subjects applied a liberal amount of the preferred embodiment of the present invention formulated as an after sun lotion to their sunburnt skin. A follow up application of the composition was applied the next day if the sunburnt skin felt dry. Only seven subjects required application of the composition the next day.

All subjects reported that the red skin which was causing sunburn pain was soothed by the composition and the skin felt moisturized. Furthermore, each subject reported the red skin color disappeared by the second day after application of the composition and a tan

resulted. After one week, none of the subjects reported peeling of the skin in the area of application, a condition they had previously reported for sunburns of comparable intensity.

5           Because aloe vera, an ingredient in the preferred embodiment of the present invention is known to have a soothing, healing effect on sunburned skin, a test comparing two after sun lotions, the first being the present composition having 10% aloe vera and the second  
10           being 97% aloe vera gel, was performed.

          A subject that had a fair complexion and was sun sensitive had his back exposed to three hours of sun radiation which resulted in a severe sunburn. Immediately after radiation exposure 2 teaspoons of the  
15           composition was applied to approximately 35% of the back, and 2 teaspoons of 97% aloe vera gel was applied to approximately another 35% of the back; a two inch band running down the middle of the back was untreated. Two teaspoons of each product was applied to the  
20           respective sunburned areas at the same time of day for the following three days. The subject reported that relief from sunburn pain was provided equally by each product. The subject also reported the aloe vera gel was sticky and therefore less comfortable than the  
25           present composition. The subject further reported extreme discomfort from the pain of the untreated band of skin.

By the third day the center band of untreated skin had peeled and the skin on the aloe vera treated area had peeled, however, the skin treated by the present composition had not peeled. On the fourth day, the margin area treated with the present composition that was immediately bordering the untreated band peeled. The remaining area that was treated with the present invention did not peel.

It was highly surprising to discover that the present composition which contains only 10% Aloe Vera has the same soothing effect as an equal amount of 97% Aloe vera gel, and resulted in less skin peeling than did the aloe vera gel. Further, while these tests were conducted for solar radiation burns, it is believed that any radiation burn, such as x-ray or cancer related radiation burns are susceptible to treatment with these compositions.

#### C. Composition As An Acne Application

A sample group in excess of ten individuals ranging in age from fourteen to fifty-eight applied the preferred embodiment of the present invention as formulated as an acne cleanser to acne eruptions on the face and neck area. Each of these individuals evidenced skin eruptions caused by an acne condition. The composition was applied on a daily basis for between 1-6 months.

Approximately one-half of these individuals used the composition as a facial wash. These individuals reported a decrease in the amount of acne after a few days of application. The remaining portion of the test individuals applied the composition and lightly scrubbed their face with a cloth. After the cleansing application was rinsed off, a second application was applied and left on the skin. These test individuals all reported a marked improvements in their complexions after a few days of applications; eventually substantially all of the acne cleared up. When the treatments were discontinued, the acne condition reasserted itself.

D. Composition As An Insect Repellent

Seventeen individuals underwent three rounds of testing in various areas of the United States. Four test individuals were in Colorado, three in Wisconsin, five in New Jersey and five in California. In the first round of testing, the present invention, formulated as an insect repellent having 20% citrus oil, was applied to all exposed areas of the body. Although untreated individuals reported insect bites, the test individuals were not bitten.

In the second round of testing, the composition was applied only to the hands. In the third round of testing the composition was applied only to the facial



area. Again, although untreated individuals reported insect bites, the test individuals were not bitten. The test individuals further reported that the orange scent of the present invention was pleasant unlike the scent of most topical insect repellants.

E. Composition For Use On Skin Irritations Due To Encounters With Poisonous Plants

In four test situations an individual that had previously encountered the poisonous plant and thus had experience with the length of time required for the exposed skin to heal was used. The test subjects were exposed to poison sumac (one test subject had 60% of his body exposed and others had hands and legs exposed). After exposure the preferred embodiment of the present invention was applied to the exposed skin. The individuals reported that the invention soothed the itching feeling and cleared up the skin irritations faster than if the composition was not employed. Furthermore, the individuals reported that the composition seemed to keep the irritation from spreading.

F. Conclusion

From the foregoing, the present composition is capable of removing unwanted substances from the skin giving skin pain relief, acne relief, and protection from insect bites. This composition has a first

ingredient of between 5% and 60% by volume of orange oil, a second ingredient being a pharmaceutical acceptable moisturizer for human skin and a third ingredient being an emulsifying agent. Preferably, the moisturizer is either one or more of a group of moisturizers selected from the following: glycerin, aloe vera, jojoba oil, safflower oil. However, other pharmaceutically acceptable moisturizers are within the scope of this invention as could be developed without undue experimentation by the ordinarily skilled person in the art according to the teachings of the present invention. One example of such moisturizer is glycerin stearate. The other compositions are thus intended, unless otherwise specifically limited, to be encompassed by the general phrase "moisturizer" both in this specification and in the appended claims. In any event, it is preferred that the resultant composition have a pH between 4.5 to 6.0 and can be buffered if necessary by the utilization of aloe vera or a buffering agent, such as baking soda.

Accordingly, the present invention has been described with some degree of particularity directed to the preferred embodiment of the present invention. It should be appreciated, though, that the present invention is defined by the following claims construed in light of the prior art so that modifications or

changes may be made to the preferred embodiment of the present invention without departing from the inventive concepts contained herein.

We Claim:

*a*  
*Sub B1* 1. A composition adapted for external use on ~~human skin tissues~~, comprising a first ingredient being between five percent (5%) and sixty percent (60%) by volume of ~~citrus oil~~, a second ingredient being a pharmaceutically acceptable moisturizer for human skin and a third ingredient being an emulsifying agent.

*B* 2. A ~~composition~~ <sup>method</sup> according to claim 1 wherein said moisturizer is selected from a group consisting of: glycerin, aloe vera, jojoba oil, and safflower oil.

*Sub A2* 3. A composition according to claim 1 wherein said emulsifying agent is an oat grain derivative product.

4. A composition according to claim 3 wherein said oat grain derivative product is one of oat gum and oatmeal.

*B* 5. A ~~composition~~ <sup>method</sup> according to claim 1 wherein said first, second and third ingredients are selected and mixed in a ratio such that the resulting composition has a pH range of between 4.5 to 6.0, inclusively.

*B* 6. A ~~composition~~ <sup>method</sup> according to claim 1 including as a fourth ingredient a buffering compound in a proportion such that the resulting composition is pH balanced within a range of 4.5 to 6.0, inclusively.

*Sub A2 B2* 7. A method of treating damaged tissue by applying to a damaged tissue area the composition of

rule  
23 B2  
Cont'd

claim 1.

- a 8. A method according to claim 7 wherein the damaged ~~tissue~~ <sup>human skin</sup> area comprises a burn.
9. A method according to claim 8 wherein the burn is a radiation burn.
- a 10. A method according to claim 9 wherein the burn is a sunburn caused by over-exposure of the ~~tissue~~ <sup>human skin</sup> area to ~~harmful~~ solar radiation.
- a 11. A method according to claim 7 wherein the damaged ~~tissue~~ <sup>human skin</sup> area comprises an inflammatory condition of the skin.
12. A method according to claim 11 wherein the inflammatory condition is acne.
13. A method according to claim 11 wherein the inflammatory condition is a rash.
- a 14. A method according to claim 13 wherein the inflammatory condition is a rash caused by contact with a ~~rash-causing poisonous~~ <sup>dermatitis-causing</sup> plant. ~~contact dermatitis~~
- Sub. B3 15. A method for soothing a sunburned area on human skin and for reducing peeling of the human skin resulting from said sunburn by topically applying to the sunburned area the composition of claim 1.
- a 16. A method of ~~repelling insects~~ <sup>repelling insects</sup> from human ~~tissue~~ <sup>skin</sup> by topically applying to the human ~~tissue~~ <sup>skin</sup> the composition of claim 1.
17. A composition for topical use on acne on human skin comprising forty-five percent (45%) or less

B3  
 a

by volume of citrus oil, forty-five percent (45%) or less by volume of ~~an~~ <sup>a grain based</sup> emulsifying agent, and a pharmaceutically acceptable moisturizer.

18. A composition according to claim 17 wherein said emulsifying agent is oatmeal.

19. A composition according to claim 17 wherein said moisturizer is a mixture of jojoba oil, aloe vera and glycerin.

20. A composition according to claim 17 wherein said mixture includes by volume four parts jojoba oil, five parts aloe vera and two parts glycerin.

21. A composition according to claim 17 wherein said mixture includes safflower oil.

a  
 5  
 22. A skin cleaning composition adapted for external use on human ~~tissues~~ <sup>skin</sup>, comprising a first ingredient being between five percent (5%) and sixty percent (60%) by volume of orange oil, a second ingredient being a pharmaceutically acceptable moisturizer for human skin and a third ingredient being an emulsifying agent.

a  
 5  
 23. A skin cleaning composition for external use on human ~~tissues~~ <sup>skin</sup>, comprising orange oil, a pharmaceutically acceptable moisturizer for human skin and an emulsifying agent, wherein said composition has a pH within a range of 4.5 to 6.0, inclusively.

24. A cleaning composition for use on human skin comprising forty-five percent (45%) or less by volume of

a  
5 orange oil, forty-five percent (45%) or less by volume  
of ~~an~~ <sup>a grain based</sup> emulsifying agent, and a pharmaceutically  
acceptable moisturizer.

*Sub B4*  
25. A cleaning product comprising a towellet  
formed of an absorbent material, said towellet being  
impregnated with a cleaning composition and hermetically  
sealed in a packet member wherein said cleaning  
composition comprises a first ~~ingredient~~ ingredient  
being between five percent (5%) and sixty percent (60%)  
by volume of orange oil, a second ingredient being a  
pharmaceutically acceptable moisturizer for human skin  
and a third ingredient being <sup>a grain based</sup> ~~an~~ emulsifying agent.  
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